

Tools and Widgets for Spatial Sound Authoring

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Broader use of virtual reality environments and sophisticated animations spawn a need for spatial sound. Until now, spatial sound design has been based very much on experience and trial and error. Most effects are hand-crafted, because good design tools for spatial sound do not exist. This paper discusses spatial sound authoring and its applications, including shared virtual reality environments based on VRML. New utilities introduced by this research are an inspector for sound sources, an interactive resource manager, and a visual soundscape manipulator. The tools are part of a sound spatialization framework and allow a designer/author of multimedia content to monitor and debug sound events. Resource constraints like limited sound spatialization channels can also be simulated.

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